

Summary of Conclusions and Recommendations

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The committee recommends that states consider classifying their ground water in conjunction with a mapping program that specifically identifies critical areas and resources for special protection. If data are not sufficient, they should be obtained to provide for classification and mapping in a phased approach. The lack of complete data should not necessarily preclude the development of a classification system. The classification criteria should be adopted through a public process. States with advanced protection programs may opt to give equal protection to all ambient waters of drinking quality.

Comprehensive classification programs depend on adequate hydrogeo-logical information to be effective. Development of the Connecticut classification system was, in large part, due to the existence of historical hydro-geological information produced by the USGS.

The committee recommends that the USGS expand its efforts to produce hydrogeological information to support state and local ground and surface water protection programs.

Ground Water Quality Standards

Water quality standards are set at various levels of government for different purposes.

Federal drinking water standards apply to all public drinking water supplies. Additional standards for drinking water at the point of use have been adopted by states.

Depending on their policy, states may also apply numerical standards directly to ground water. These may be designed to protect drinking water quality, other beneficial uses, and critical ecological systems. They may also be used to define nondegradation of high-quality waters. In some cases a safety factor is built in, where the standard is set at a fraction of the enforcement limit. This allows for future growth and the uncertainty associated with ground water protection technology.

One important issue states are faced with is what ambient standards should be set for individual organic contaminants in ground water for various uses, including drinking water, irrigation, and ecological protection. The task of setting these standards is complex. For this reason, most states have looked to the Environmental Protection Agency (EPA) to set standards or guidelines and to provide technical information that states can use in setting ambient standards for pollutants.

Many states have used EPA drinking water standards or recommended limits as a basis for setting ambient ground water quality standards. However, EPA has adopted limits for only a few of the most significant organic chemical contaminants. In the absence of EPA limits, some states such as New York and New Jersey have set ambient and drinking water standards